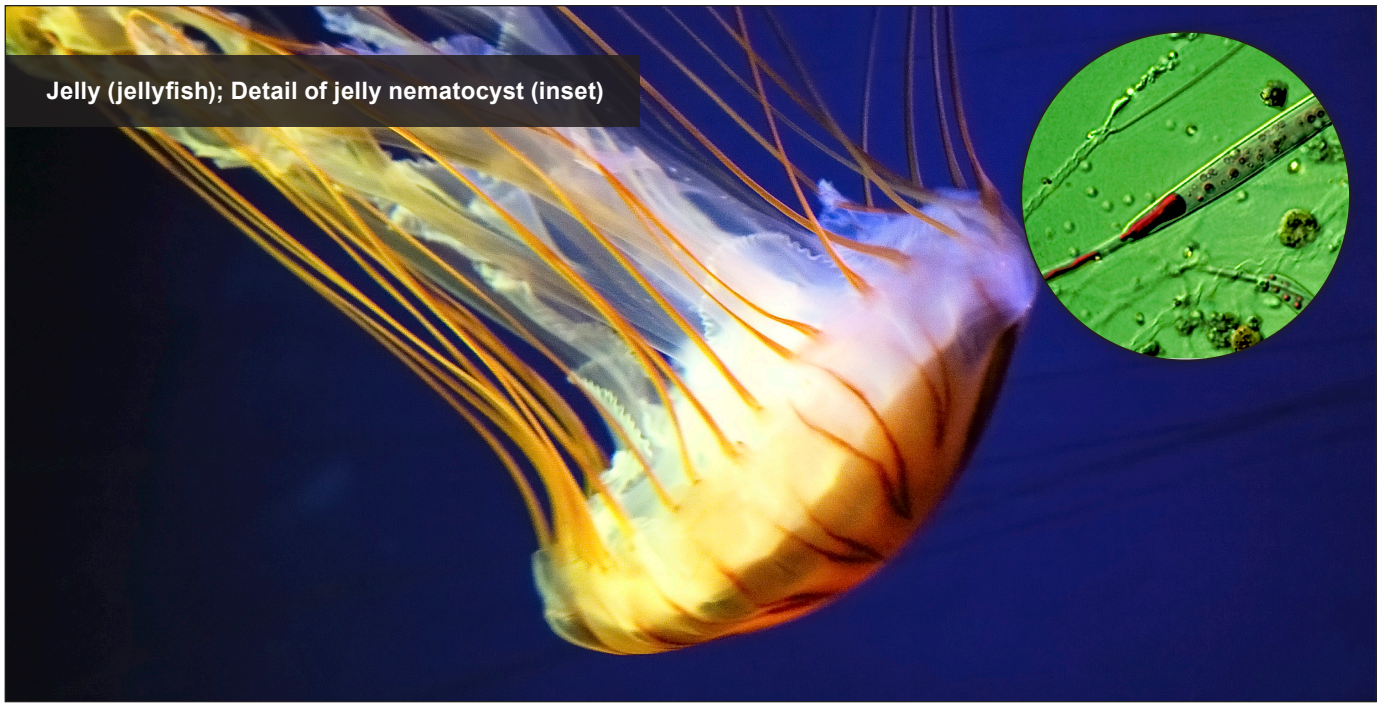

Jelly (jellyfish); Detail of jelly nematocyst (inset)

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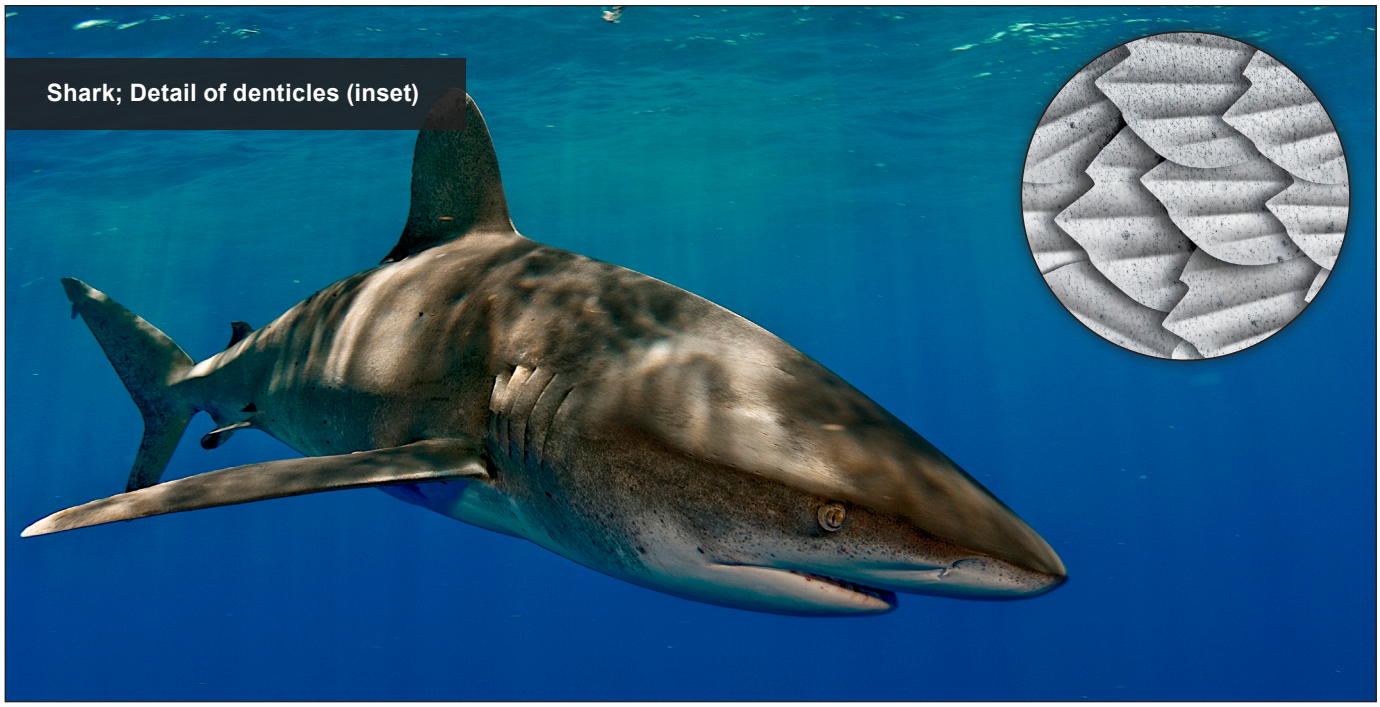
Sea urchin tube feet; Detail of spines (inset)

Jellies (Jellyfish)

Jellies (jellyfish) have specialized stinging cells (nematocysts) that they use to immobilize prey. Their transparent bodies camouflage them, and most have stinging cells to help protect them from predators. Their hydrostatic skeletons allow them to live at all depths under varying water pressure. Jellies release sperm or eggs into the water, during reproduction, where they are fertilized.

Sea Urchin

Sea urchins have tube feet that allow them to catch and manipulate prey. Their hard exoskeletons and spines protect them from predation and abiotic factors, such as wave action. Many species are also toxic, a feature that protects them from predation. Male sea urchins release sperm into the water, during reproduction, where they come in contact with and fertilize the eggs released by female sea urchins.



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4 **Adaptations to Selection Pressures**
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Shark

Sharks have denticles, teeth-like projections on their skin that allow them to move quickly through water in pursuit of their prey. They possess many specialized sensory abilities, including a strong sense of smell that allow them to detect prey at great distances. Sharks also have gill slits that allow water to flow easily past their gills, increasing gas exchange and helping them to get enough oxygen from the water. Shark eggs are fertilized in the female. Some species of sharks release fertilized eggs into the water in egg cases. Other species give live birth.

Whale

Some whales use echolocation to find food like schools of fish. Other species of whales use large plates of baleen to filter plankton from the water as they swim. Many species have a complex system of vocalizations that they use to communicate, especially during mating season. They have blubber layers that help keep them warm and collapsible sinuses that allow them to dive to great depths. Their flippers propel them through the water with ease. The size of most whales protects them from predation.